FINAL
ENVIRONMENTAL ASSESSMENT

for

Whetstone Sportsman & Conservation Club
Trap Range Development,
Milbank, Grant County, South Dakota

December 2006

Prepared By

Division of Federal Assistance,
U.S. Fish and Wildlife Service, Region 6

and

South Dakota Department of Game, Fish and Parks
Pierre, South Dakota

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Final Environmental Assessment

Whetstone Sportsmen and Conservation Club Trap Range,
Milbank, South Dakota

CHAPTER 1 PROJECT SUMMARY, PURPOSE AND NEED

1.1 PROJECT SUMMARY

Location:
County: Grant Co. City: Milbank
Township/Range/Section: SW1/4 of Section 23, T121N, R48W
(Map of proposed site location – Attachment 1)

South Dakota Department of Game, Fish and Parks (GFP) is seeking federal assistance to help in developing a 6.0 acre trap range in Grant County, located in the northeastern part of South Dakota. Funding for projects such as this comes from the Pittman-Robertson Federal Aid in Wildlife Restoration Act administered through the United States Fish and Wildlife Service. This Act provides funding to assist in the development and improvement of safe and responsible public recreational shooting facilities and to enhance hunter education efforts. The project is estimated to cost approximately $41,500. The matching non-federal funding for this project will be provided by the Whetstone Sportsman and Conservation Club (WSCC) Milbank, South Dakota.

A Lease Agreement was signed between the landowners and the WSCC for no less than 20 years after the completion of the range for no less than 6.0 acres of land to use to develop a new trap range (Attachment 2). The range will be open to the public and operated by the WSCC.

The proposed range would require the construction of a 14’ x 28’ A-frame utility shed, the installation of an ADA-accessible Porta-Potty, the construction of two (2) trap houses with five (5) walkways each, the construction of an ADA ramp to the building, the installation of electrical wiring for the building, the construction of an approach to the range, and the movement of the flood lights and poles from the previous range to the proposed range.

Range construction would be supervised by WSCC and GFP. Operation and maintenance would be taken care of by WSCC. Operation and maintenance responsibilities will consist of litter control and other operational activities to keep the range in good condition.

1.2 PURPOSE

The South Dakota Hunter Education Program began in 1956 when the state legislature passed a law, SDCL 41-7, requiring that all persons under the age of 16 years complete a four hour course in “firearms safety: to become eligible to obtain a hunting license. Since the program was implemented, over 224,000 students were trained and certified in the basic program.

The Hunter Education Program utilizes classroom instruction, evaluation of student performance and instructor quality, range maintenance and improvement, public information and media programs, and administrative functions in order to meet the objectives of the program.

The purpose of this project is to develop and construct a public outdoor shooting facility for safe and responsible public recreation opportunities and to enhance hunter education efforts for the Milbank area.

The purpose of this Environmental Assessment (EA) is to review the feasibility and potential for environmental consequences associated with alternatives considered.

1.3 NEED

WSCC is located in Grant County, where pheasant and waterfowl hunting is a very popular outdoor recreation pursuit. The current trap range and proposed trap range are located near the city of Milbank, South Dakota, which is in the northeastern part of the state. Milbank is a city of approximately 3,640 people and is primarily an agricultural community. The current range location is being threatened with urban encroachment. A golf course is located adjacent to the range and also abuts land that is currently being developed for housing. The current location of the range poses a safety risk to both the persons living in nearby homes and the persons using the golf course. The WSCC is proposing to relocate their range to a site located 3 miles north and 1 mile west of Milbank. The relocation of this trap range to the proposed site would provide improved safety over the current site conditions, accessibility for users with disabilities, and an improved hunter safety education facility. The project will take place on a 6 acre tract that has been secured through a 20 year use agreement between the club and the land owner.

1.4 DECISIONS THAT NEED TO BE MADE

The USFWS Regional Director will select one of the alternatives analyzed in detail and will determine based on the facts and recommendations herein, whether this EA is adequate to support a Finding of No Significant Impact (FONSI) decision, or whether an Environmental Impact Statement (EIS) will need to be prepared.

CHAPTER 2 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

2.1 ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED ANALYSIS

When considering alternatives for a new range location, WSCC was limited by cost of purchasing land. As a result no other alternatives were considered.

2.2 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS

2.2.1 Alternative A – Proposed Action

See Chapter 1, Project Summary. The proposed site would provide improved safety over the current site conditions, accessibility for users with disabilities, and an improved hunter safety education facility. The site has been previously disturbed during agricultural farming uses. Firing would be oriented toward the east direction. The shot fall area will be in the field owned by the same land owner that the range site is leased from. The field where the shot will fall is agriculturally farmed for a grain crop. See Attachments 4 and 8.

Construction would involve excavation for the placement of two trap houses, construction of walkways, electrical trenching, installation of flood light poles and installation of a culvert for the building approach. An A-Frame utility/storage shed will be constructed upon a floating concrete slab. The approach to the proposed range is currently a trail and would be improved by adding gravel to the surface.

The range would be open to public use year-round from sunrise to sunset for trap shooting. There will be supervised sessions during hunter safety classes. Damage by irresponsible shooters or vandalism will be repaired by WSCC.

The proposed site is considered suitable based on the following criteria:

- Proximity to the city of Milbank – A large number of range users will be from Milbank and the surrounding area. The driving directions from the city of Milbank to the proposed range would be easy for the public and persons not familiar to the area to find.
- Availability for long term lease – The club was able to enter into a lease for a minimum of 20 years for a 6 acre tract of land.
- Land use – The proposed site is a well disturbed area where farm equipment was stored and agricultural farming took place.
- Habitat type – Due to the disturbed nature of the site, habitat type is very poor, so there would be no additional disruption of any habitat by the proposed activities.
- Suitable access road – The proposed site has an existing access road that would only require some additional gravel and a culvert.

- Distance from occupied dwellings – The nearest occupied dwelling is adjacent to the west side of the site and is owned by the land owner the club is leasing from. The direction of firing is over a field and has a low potential for any nearby development.
- Topography – The topography of the area surrounding the site has gentle slopes and sightability down range is high.
- Wetlands – There are no wetlands in the direction of fire. The lead shot will fall into a field that is cultivated for agricultural purposes. The direction of fire will run parallel to a creek bottom. The nearest point of the creek to the proposed site is approximately 500 feet. The soil type is a Forman-Aastad loam, which has a 1 to 6% slope. To see where the creek is in relation to the proposed site, see Attachment 10.

2.2.2 Alternative B – No Action

This alternative is to do nothing and to continue to use the existing trap range. Safety needs and issues would not be resolved with continued development around the range. Attachment 9 shows pictures of the development that is occurring adjacent to the current range. The trap house in picture B can no longer be used due to a house being built in the line of fire from the trap house walkway. Attachment 16 shows pictures from the trap range with the golf course in the line of fire. Picture C is taken from one of the trap house walkways and there is a golfer in the line of fire. The shooting range and the golf course cannot be used at the same time due to safety issues, which also causes an inconvenience to users of both facilities due to recreational conflict.

Having a public facility located behind the small hill seen in Attachment 16, pictures B and C, in the range of fire has a high risk of danger that someone might be at the golf range during the time that the shooting range is open.

The new housing development adjacent to the shooting range seen in Attachment 9, the club has already closed one of it's trap houses to decrease the risk of injuring a resident or hitting one of the houses. However, there is still a risk of stray BBs.

2.2.3 Alternative C – Change the direction of firing at the current trap range

This alternative would change the direction of firing from the east direction to the southeast direction. See Attachment 5.

The construction involved would be to remove the current trap houses and walkways, and construct new trap houses and walkways oriented toward the southeast direction.

This alternative would only be a temporary solution as the area around the trap range continues to be developed.

2.3 SUMMARY OF ALTERNATIVES ACTION TABLE

Table 1. Summary of Alternatives Action Table

Actions	Alternative A (proposed action)	Alternative B (no action)	Alternative C (change firing direction)
Ownership	Private – lease	Private – lease	Private - lease
Public Accessibility	Yes	Yes	Yes
Site Development	Yes	No	Yes
Utilities Present	No	No	No
Habitat Present	No, cultivated soil	Marginal	Marginal
Nearest Urban Development	1 mile	Land borders urban development	Land borders urban development
Risk of recreation use conflicts	Low	High	Medium to High

CHAPTER 3 AFFECTED ENVIRONMENT

Continued use of the current trap range carries with it the potential for safety issues to shooting range users, golf course users, and neighboring residents. The current range is located adjacent to a housing development on the north and a golf course to the northeast, with firing occurring toward the east (Attachments 7 and 9). South Dakota Highway 15 runs north/south on the west side of the range.

The proposed site for the new range is located adjacent to a farm site and would be developed upon 6 acres of disturbed ground, which is used for agricultural purposes.

3.1 PHYSICAL CHARACTERISTICS

Grant County is located in the northeastern part of South Dakota (Attachment 6). A majority of the county is located on the Coteau Des Prairies, which is a highland plateau. Communities in Grant County are predominately agricultural in nature.

3.1.1 ALTERNATIVE A – PROPOSED ACTION

Construction activities for the proposed alternative A would be done within a disturbed area. The site is located adjacent to a farm site and located upon an area that has been agriculturally farmed.

The soil at the site is Forman-Aastad loam (FdB), which is a Prime soil for farmland (Attachment 11). A Farmland Conversion Impact Rating was done to evaluate if the conversion of the farmland to a non-agricultural use would have an impact on farmland in Grant County (Attachment 10). If the score of 160 points or greater is obtained, then the action will have a significant impact on prime or important farmland. The proposed site scored 156 points.

The proposed site is located approximately 500 feet south from a creek bed (Attachment 8). The site is also located approximately 2.2 miles SW of Whetstone River. No wooded areas will be affected.

The proposed range is adjacent to crop land, which produces dust during cultivation and tilling. The proposed project will not have any affect on dust caused by agricultural practices.

3.1.2 ALTERNATIVE B – NO ACTION

There are no wetlands or waterways at the site. There are wetlands that have been farmed over and developed 200 feet southwest and 265 feet northwest of the site. A pond on the golf course is located 1660 feet northwest of the site and a stream bed, where the closest point to the site is on the golf course, is 1520 feet to the northwest of the site (see attachment 7). The Whetstone River is located approximately 2.3 miles northeast of the site (see Attachment 1).

The site is located on both FdA (Forman-Aastad loam 0 to 2 percent slopes) and FdB (Forman-Aastad loam 1 to 6 percent slopes), both soil types are Prime soils for farmland (Attachment 11). Although the site is located on prime soils, the site has been previously disturbed when the range was first developed and is no longer used for agricultural purposes.

3.1.3 ALTERNATIVE C – CHANGE DIRECTION OF FIRING

Construction activities for alternative C would be done within a disturbed area where the range currently exists. The construction would be to move the trap houses in order to orient the firing from the east direction to the southeast direction. The land is adjacent to an agricultural field to the east and south of the site, a housing development to the north of the site, and a golf course to the northeast of the site.

There are no wetlands or waterways at the site, nor are there any that will be affected. There are wetlands that have been farmed over and developed 200 feet southwest and 265 feet northwest of the site. A pond on the golf course is located 1660 feet northwest of the site and a stream bed, with the closest

point to the site is on the golf course, 1520 feet to the northwest of the site. The Whetstone River is located approximately 2.3 miles northeast of the site. The site is located on both FdA (Forman-Aastad loam 0 to 2 percent slopes) and FdB (Forman-Aastad loam 1 to 6 percent slopes), both soil types are Prime soils for farmland (Attachment 11). Although the site is located on prime soils, the site has been previously disturbed when the range was first developed and is no longer used for agricultural purposes.

Dust at the current range could be generated by vehicles accessing the current shooting range via the gravel access road and parking area. The current range is adjacent to crop land, which produces dust during cultivation and tilling.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 VEGETATION/HABITAT

Alternative A – Proposed Action
The site where construction would take place is currently being used for agricultural purposes. There is no native vegetation at the site resulting in minimal habitat for wildlife. According to Attachment 12, both the Foreman and Aastad components of the soil have good potential for Openland wildlife and very poor for Wetland wildlife. However, the Foreman component has good potential for Range land, but the Aastad component is fair.

Alternative B – No Action
No vegetation or habitat would be affected as no construction would take place.

Alternative C – Change Direction of Firing
The site where construction would take place is currently being used as a trap range. According to Attachment 12, both the Foreman and Aastad components of the soil have good potential for Openland wildlife and very poor for Wetland wildlife. However, the Foreman component has good potential for Range land, but the Aastad component is fair.

3.3 THREATENED, ENDANGERED AND CANDIDATE SPECIES

Alternative A – Proposed Action
A search of the Natural Heritage Database records for endangered and threatened species, natural areas or other rare biological communities indicate that there is a low probability that threatened, endangered or candidate species will be affected by this alternative as there is no habitat where these species would be found at the proposed site.

Bald eagles are known to be located in Grant county. According to the Natural Heritage Database, the closest active nest is approximately 9 miles northeast of the proposed site.

Topeka Shiners have not been documented in Grant county, but because a portion of a watershed exists within the county, they may occur in those areas. The potential for the fish to occur in a creek or river near the proposed shooting range is low. A map of documented locations can be seen on a map from the Topeka Shiner (*Notropis Topeka*) Management Plan for the State of South Dakota can be found in Attachment 19.

Alternative B – No Action
No threatened, endangered or candidate species will be affected as no construction would take place.

Alternative C – Change Direction of Firing
A search of the Natural Heritage Database records for endangered and threatened species, natural areas or other rare biological communities indicate that there is a low probability that threatened, endangered or candidate species will be affected by this alternative as this site is a long standing trap range and these species would avoid this area. The shooting range would provide marginal to poor habitat for wildlife. See Attachment 13.

Bald eagles are known to be located in Grant county. According to the Natural Heritage Database, the closest active nest is approximately 8 miles northeast of the existing range.

Topeka Shiners have not been documented in Grant county, but because a portion of a watershed exists within the county, they may occur in those areas. The potential for the fish to occur in a creek or river near the existing shooting range is low. A map of documented locations can be seen on a map from the Topeka Shiner (*Notropis Topeka*) Management Plan for the State of South Dakota can be found in Attachment 19.

3.4 OTHER WILDLIFE SPECIES

Alternative A – Proposed Action
Small common mammals, such as mice and voles, use the area for food and cover. Deer and turkeys may traverse through the area. Pheasants may be found on the edges of the field where there is grass cover all year long.

Alternative B – No Action
Small common mammals, such as mice and voles, use the area for food and cover.

Alternative C – Change Direction of Firing
Small common mammals, such as mice and voles, use the area for food and cover.

3.5 LAND USE

Alternative A – Proposed Action
Alternative A is located at a site that is currently used for agricultural purposes. The land surrounding the site is also agriculturally farmed. Approximately half of the proposed 6 acre site is used for storage of waste such as old lumber and tires (Attachment 4). The other half of the proposed site is agriculturally farmed for grain crops.

Residences are scattered around the area. There are 15 residences located within a one mile radius of the proposed site. Table 2 lists approximate distances and directions from the proposed shooting range to listed residences. Residences in red font have an overlap with the one mile radius around the existing shooting range, this overlap represents 26.6% of the residences occurring within a one mile radius of the proposed shooting range.

Table 2. Approximate distance from proposed shooting range to nearby residences

	Approx. distance from site (Miles)	Direction
Residence #1	0.98	East
Residence #2 (Landlord)	0.06	West
Residence #3	0.18	West
Residence #4	0.71	SW
Residence #5	0.71	SW
Residence #6	0.98	West
Residence #7	0.9	NW
Residence #8	0.96	NW
Residence #9	0.52	NW
Residence #10	0.77	NW
Residence #11	0.73	NW
Residence #12	0.79	NE
Residence #13	0.89	SE
Residence #14	0.95	SE
Residence #15	0.98	SE

Table 3 represents the residents listed in table 2 that live within a one mile radius of the proposed shooting range. The table shows the proportion of residences within four range categories from the proposed shooting range. There are approximately 13.3% of the residences occurring between 0 and 0.25 miles of the proposed site, which includes the landlord who lives 0.06 miles from the

proposed site. The landlord lives on land adjacent to the proposed site to the west. The largest category of residents living between 0.76 and 1.0 miles from the proposed site includes approximately 60.0% of the 15 residences occurring within a one mile radius of the proposed site.

Table 3. Proportion of residences occurring within four ranges of the proposed site.

Range (miles)	# Residences	Percent in range
0-0.25	2	13.3%
0.26-0.5	0	0.0%
0.51-0.75	4	26.7%
0.76-1.0	9	60.0%
TOTAL	15	100.0%

Alternative B – No Action

The site is currently used as a trap range. The land surrounding the range includes both agricultural land, land being developed for urban use, and is adjacent to a state highway.

Alternative C – Change Direction of Firing

Alternative C is located at a site that has been developed for the use as the current trap range. The land surrounding the range includes agricultural land to the east and south of the range. The land to the north of the range is a new housing development. The land to the northeast of the range is a golf course, in fact a putting green and two holes of the course are located directly east of the range and the driving range is shared with the shooting range, which is a high risk as the line of fire is currently in the east direction. A residence is located 0.4 miles south of the range.

Residences are scattered around the area, but have a higher concentration around the golf course and shooting range. There are 17 residences located within a one mile radius of the existing site. Table 4 lists approximate distances and directions from the proposed shooting range to listed residences. Residences in red font have an overlap with the one mile radius around the proposed shooting range, this overlap represents 23.5% of the residences occurring within a one mile radius of the existing shooting range.

Table 5 represents the residents listed in table 4 that live within a one mile radius of the existing shooting range. The table shows the proportion of residences within four range categories from the existing shooting range. There are approximately 47.1% of the residences occurring between 0 and 0.25 miles of the existing range, which is the largest category of residents.

Table 4. Approximate distance from existing shooting range to nearby residences

	Approx. distance from site (Miles)	Direction
Residence #1	0.83	North
Residence #2	0.78	South
Residence #3	0.7	South
Residence #4	0.5	South
Residence #5	0.43	South
Residence #6	0.95	SE
Residence #7	0.14	NE
Residence #8	0.15	NE
Residence #9	0.16	NE
Residence #10	0.13	North
Residence #11	0.16	North
Residence #12	0.19	North
Residence #13	0.4	North
Residence #14	0.27	North
Residence #15	0.19	North
Residence #16	0.2	North
Residence #17	0.75	South

Table 5. Proportion of residences occurring within four ranges of the existing shooting range

Range (miles)	# Residences	Percent in range
0-0.25	8	47.1%
0.26-0.5	4	23.5%
0.51-0.75	2	11.8%
0.76-1.0	3	17.6%
TOTAL	17	100.0%

3.6 CULTURAL/HISTORICAL RESOURCES

Alternative A – Proposed Action

An initial review was done by GFP using the Archaeological Resources Management System database, developed and maintained by the S.D. State Historical Society Archaeological Research Center, Department of Tourism and State Development. GFP recommended a determination of "No Historic Properties Affected" based on the results which showed that no sites were located within a 1-mile radius of the site.

Consultation letters were sent to the State Historical Preservation Office (SHPO) and to ten Tribal Historical Preservation Offices (THPO). The SHPO responded with a concurrence of our determination that "No Historic Properties Affected." Consultation letters can be found in Attachments 14 and 15.

Alternative B – No Action
An initial review was done by GFP using the Archaeological Resources Management System database, developed and maintained by the S.D. State Historical Society Archaeological Research Center, Department of Tourism and State Development. GFP made a determination of "No Historic Properties Affected" based on the results which showed that no sites were located within a 1-mile radius of the site.

Alternative C – Change Direction of Firing
An initial review was done by GFP using the Archaeological Resources Management System database, developed and maintained by the S.D. State Historical Society Archaeological Research Center, Department of Tourism and State Development. GFP made a determination of "No Historic Properties Affected" based on the results which showed that no sites were located within a 1-mile radius of the site.

Consultation letters were sent to the State Historical Preservation Office (SHPO) and to ten Tribal Historical Preservation Offices (THPO). Three responses were received from the ten tribes that were contacted. The Flandreau Santee Sioux Tribe responded with having no interest in the geographic area and the proposed undertaking. Letters from the Rosebud Sioux Tribe and the Cheyenne River Sioux Tribe indicated that they concurred with our determination of "No Historic Properties Affected." The SHPO responded with a concurrence of our determination that "No Historic Properties Affected." Consultation letters can be found in Attachments 14 and 15.

3.7 LOCAL SOCIO-ECONOMIC CONDITIONS

The nearest city is Milbank, which is located 1 mile east and 3 miles south of the proposed site. Milbank has a population of approximately 3,640 people. The community is primarily an agricultural community.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

4.1 IMPACT SPECIFIC TO ALTERNATIVES CONSIDERED

4.1.1 BIOLOGICAL ENVIRONMENT

A. VEGETATION/HABITAT

Alternative A – Proposed Action
Minor negative impacts would be expected. The proposed site is a disturbed agricultural field that provides marginal habitat. A portion of the proposed site

has some grass cover and the remaining portion is agriculturally farmed and has ground cover when the crop has been planted. The site habitat has potential for use by microtines (mice, shrews and voles) and other species such as ground squirrels, raccoons, opossums, and cottontail rabbits. The club use of the facility year-round would possibly hamper the use of the site by wildlife but would not impact the use by microtines and other small species.

Alternative B – No Action

No impact. The existing range would not be altered and there would be no change in the habitat value.

Alternative C – Change Direction of Firing

Minor negative impacts would be expected. The range is a long standing development and this alternative would require the walkways and trap houses to be removed and rebuilt oriented to the south-east.

B. THREATENED, ENDANGERED AND CANDIDATE SPECIES

Alternative A – Proposed Action

As noted in the attached consultation letter (Attachment 13), the proposed action would have a low risk that sensitive species are present or would be impacted by this action.

Bald eagles are known to be located in Grant county and there is potential habitat surrounding the proposed location. According to the Natural Heritage Database, there are currently only two known nests in Grant county with the closest active nest approximately 9 miles northeast of the proposed site. The proposed action would have no change in impact on the known nest as the current shooting range is one mile closer to the known nest.

Topeka Shiners have not been documented in Grant county, but because a portion of a watershed exists within the county, they may occur in those areas. The potential for the fish to occur in a creek or river near the proposed shooting range is low. A map of documented locations can be seen on a map from the Topeka Shiner (*Notropis Topeka*) Management Plan for the State of South Dakota can be found in Attachment 19. The potential for impact by the proposed project on the Topeka shiners is low.

Alternative B – No Action

There would be no impacts if no action is taken.

Alternative C – Change Direction of Firing

As noted in the attached consultation letter (Attachment 13), the proposed action would have a low risk that sensitive species are present or would be impacted by this action.

Bald eagles are known to be located in Grant county. According to the Natural Heritage Database, the closest active nest is approximately 8 miles northeast of the existing range. This action would have no change in impact on the known nest.

Topeka Shiners have not been documented in Grant county, but because a portion of a watershed exists within the county, they may occur in those areas. The potential for the fish to occur in a creek or river near the existing shooting range is low. A map of documented locations can be seen on a map from the Topeka Shiner (*Notropis Topeka*) Management Plan for the State of South Dakota can be found in Attachment 19. The potential for impact by this alternative on the Topeka shiners is low.

C. OTHER WILDLIFE SPECIES

Alternative A – Proposed Action

As noted in the attached consultation letter (Attachment 13), the proposed action would have a low risk that wildlife species would be impacted by this action. There is minimal use by wildlife during the spring and winter when there is no cover due to the agricultural harvest of the field. During the summer and fall, until harvest takes place, there is some cover provided depending upon the crop type.

Alternative B – No Action

There would be no impact if no action is taken.

Alternative C – Change Direction of Firing

As noted in the attached consultation letter (Attachment 13), the proposed action would have a low risk that wildlife species would be impacted by this action. There is minimal use by wildlife due to having no cover at the current field.

4.1.2 LAND USE

Alternative A – Proposed Action

The land use would be changed from agricultural to the proposed shooting range. A portion of the site where the proposed range is located is an area where old agricultural machinery sits. The machinery would be removed. The firing would be done over the other portion of the proposed range which is an agricultural field, which will remain in agricultural production of grain

crops. The shotfall area will occur in the field which will be cultivated and planted each year.

Alternative B – No Action

There would be no change.

Alternative C – Change Direction of Firing

There would be no change.

4.1.3 CULTURAL/HISTORICAL RESOURCES

Alternative A – Proposed Action

As noted in the attached consultation letter (Attachment 14), no historical or cultural resources are known to occur at the site. No impacts are expected.

Alternative B – No Action

There would be no impacts.

Alternative C – Change Direction of Firing

As noted in the attached consultation letter (Attachment 14), no historical or cultural resources are known to occur at the site. No impacts are expected.

4.1.4 ENVIRONMENTAL JUSTICE

Alternative A – Proposed Action

This alternative would have the small positive impact on Environmental Justice by providing a quality recreational facility that would be accessible to the public and all potential user groups, by means of providing accessible facilities.

Alternative B – No Action

There would be no change. The site is open to the public. There are no accessible facilities at this site.

Alternative C – Change Direction of Firing

The current range is open to the public and would remain open to the public. There are currently no accessible facilities at the range, but the plans for this alternative would include upgrades so that the facility is accessible to all potential user groups.

4.1.5 FLOODPLAIN/WETLANDS IMPACTS

Alternative A – Proposed Action

The project area does not contain nor would it impact any wetlands. The proposed site is located approximately 500 feet south from a creek bed. The site is also located approximately 2.2 miles SW of Whetstone River (see Attachments 1 and 10). The direction of fire will be toward the east over an agricultural field and parallel to the creek bed.

Alternative B – No Action

The existing range would remain unchanged and public use to the facility will continue.

Alternative C – Change Direction of Firing

The existing range does not contain any wetlands and this alternative would not impact any wetlands. There are wetlands that have been farmed over and developed 200 feet southwest and 265 feet northwest of the site. A pond on the golf course is located 1660 feet northwest of the site and a stream bed, with the closest point to the site is on the golf course, 1520 feet to the northwest of the site. The Whetstone River is located approximately 2.3 miles northeast of the site. These wetlands would not be impacted by this alternative. See Attachments 1 and 7.

4.1.6 NOISE

Alternative A – Proposed Action

High levels of noise could be encountered in the immediate vicinity of the range. There are 15 occupied farms located within a one-mile radius of the proposed range. The occupants were informed of the proposed range by the club and no opposition resulted. Noise levels will result in disturbance for residents living in the vicinity of the range, but the noise levels are not expected to cause any disturbance for residential areas in the city of Milbank. See Tables 2 and 3 for distances between proposed range and nearby residences.

Alternative B – No Action

There would be no change. The golf course has complained to the club about noise. An area of land adjacent to the range is being developed for housing. These people will be affected by the noise from the range.

Alternative C – Change Direction of Firing

There would be no change. The golf course has complained to the club about noise. An area of land adjacent to the range is being developed for housing. These people will be affected by the noise from the range. See Tables 4 and 5 for distances between existing rang and nearby residences.

4.1.7 LEAD

The accumulation of spent lead on the range could create a risk of lead contamination to groundwater. This is not known to cause a problem at other South Dakota shooting ranges. Due to the lead breakdown in water, shooting ranges where lead fallout would occur over water are discouraged. There is also the potential of the ingestion by wildlife feeding in these areas and the contamination of surface or groundwater. If there is a high concentration of lead in an area, there is also potential for negative human health effects when ingested via water.

Alternative A – Proposed Action

Potential effects may result from introducing a toxic substance to the environment in the form of lead pellets (shot) from shotgun shells.

Lead is toxic to wildlife if ingested, especially if individuals ingest the pellets as grit. Upland game that may be affected include Mourning Doves, Gray Partridge, Ring-Necked Pheasant, Sharp-Tailed Grouse, and Turkey. Waterfowl also have the potential to be affected. The affects on all other species of wildlife should be minimal. The fall out zone where the lead will be deposited is over an agricultural field. The field is cultivated and planted every year, so the lead is being turned over in the soil at least once a year. Larger species of wildlife tend to use the edge of an agricultural field or are moving through the area because it is a variable and temporary habitat. During the fall and winter when there is no food source in the field, animals would probably avoid the area except if they were moving through the area. During the spring and summer, wildlife that use the crop as a food source tend to eat the leaves on the plant, reducing the risk of lead ingestion. The most vulnerable time of accidental ingestion during feed would occur during the first week or two after the crop has sprouted and is closer to the ground.

The firing at the proposed site would occur over an agricultural field where lead recovery would not be possible due to cultivation and tilling. Cultivation and tilling buries the lead in the soil which may increase mobilization because the lead is being moved below the soil surface, however cultivation also adds organic matter into the soil which lead particles bind to which would limit environmental activity of lead (National Shooting Sports Foundation 1997). The soil type in the shot fall zone is a Forman-Aastad loam which consists of a dark gray loam on the surface, a grayish brown clay loam subsurface, and a calcareous underlying material (Miller 1979). Lead has a high bonding capacity to ions in clay soil particles and clays also have a greater amount of surface area for more bonding (U.S. Environmental Protection Agency 2003). Cultivation and tilling buries the lead in the soil which decreases the availability of lead shot to wildlife (National Shooting Sports Foundation).

The proposed site is located approximately 500 feet south from a creek bed (see Attachment 10). The direction of fire will be toward the east over an agricultural field and parallel to the creek bed. Due to particle binding mentioned in the previous paragraph, lead mobility is decreased. However, because water permeates through clay slowly, a high amount of rainfall could cause some runoff toward the creek.

Alternative B – No Action

Potential effects are the same as Alternative A. There is currently no lead recovery.

Alternative C – Change Direction of Firing

Potential effects are the same as Alternative A. The firing would occur over an agricultural field where lead recovery would not be possible due to cultivation and tilling. Cultivation adds organic matter into the soil which lead particles bind to which would limit environmental activity of lead. Cultivation and tilling buries the lead in the soil, but it does decrease the availability of lead shot to wildlife.

4.1.8 ECONOMIC IMPACTS

There are no expected local socio-economic impacts to the community. The club has a range currently in operation, so there is no expected change to occur if the range is moved to another location or if the firing direction were to be changed.

Alternative A – Proposed Action

No major economic impacts are expected. GFP would apply for $41,500 of Pittman-Robertson Federal Aid in Wildlife Restoration funds to help develop the new shooting range.

Alternative B – No Action

No major economic impacts are expected.

Alternative C – Change Direction of Firing

No major impact. Federal funding could be used for other projects. GFP would apply for $41,500 of Pittman-Robertson Federal Aid in Wildlife Restoration funds to help renovate the range so that the direction of fire is oriented to the southeast direction.

4.1.9 SAFETY

Alternative A – Proposed Action

The terrain at the site is flat, which would allow shooters to see anything approaching in the field of fire (see Attachment 4). The nearest residence to the east (direction of firing) from the proposed range is 1.08 miles. The

nearest resident to the northeast is 0.84 miles and the nearest resident to the southeast is 0.97 miles. This site provides a safe opportunity with a minimal risk of BBs traveling more than 680 feet.

Alternative B – No Action

There would be no change. Safety at the existing unimproved range would continue to be low and the potential risk for an accident would continue to be high.

Alternative C – Change Direction of Firing

There would be a small reduction in accident risk. This solution would only be a temporary solution as the area has the potential to continue to be developed. Development adjacent to the current shooting range can be seen in Attachments17 and 18. The aerial photo in Attachment 17 was taken October 21, 1991, and the aerial photo in Attachment 18 was taken July 14, 2004. There is an occupied residence to the south of the range, a housing development to the north, and a golf course to the northeast with two holes being directly east of the range. Safety would continue to be a high risk at this site and the changing of the direction of firing would not have any significant change in the risk potential. See Attachments 5 and 9.

4.1.10 RECREATION

Alternative A – Proposed Action

Alternative A would provide recreation to users, improve year-round public access, be accessible to all persons, and improve hunter education opportunities.

Alternative B – No Action

There would be no change, the site would remain accessible to the public during designated times when golf course is not open. However, the direction of firing is in the east direction. There is a putting green and two holes of the golf course directly east of the trap range. There is a recreational conflict between the golf course and the trap range as the risk of injury for the users of the golf course is high, especially for those using the portion of the golf course located in the direction of fire (Attachment 16).

Alternative C – Change Direction of Firing

There would be a small decrease in recreational conflict between the trap range and the golf course. By changing the direction of fire to the southeast, the putting green and two holes on the golf course would no longer be in the direction of fire (Attachment 16). The driving range would still be a conflict between golf course and trap range.

4.1.11 CUMULATIVE IMPACTS

Alternative A – Proposed Action

This alternative would meet one of GFP's objectives of range improvement and promoting hunter safety. This alternative would create a safer and more accessible facility for public recreation opportunity and hunter education. No conflicts with local, state or federal plans or policies are expected. The accumulation of spent lead on the range could create a risk of lead contamination to groundwater. This is not known to cause a problem at other South Dakota shooting ranges.

Alternative B – No Action

There would be no change. Current firing practices would continue. GFP's goal of range improvement and promoting hunter safety would not be met in this situation.

Alternative C – Change Direction of Firing

This alternative would meet one of GFP's objectives of range improvement and promoting hunter safety to a lesser degree than Alternative A. This alternative would only be a short term fix as development continues to occur around the existing range. This alternative would create a more accessible facility for the public, but safety would still be an issue at this site. No conflicts with local, state or federal plans or policies are expected. The accumulation of spent lead on the range could create a risk of lead contamination to groundwater. This is not known to cause a problem at other South Dakota shooting ranges.

4.2 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 6. Summary of Environmental Consequences by Alternative

Impact Type	Alternative A (Proposed)	Alternative B (No Action)	Alternative C (Change Direction of Fire)
Vegetation /Habitat	minor negative impact	no impact	minor negative impact
Thr./End./Cand. Spp.	low risk of adverse impact	no impact	low risk of adverse impact
Other Wildlife Spp.	low risk of adverse impact	no impact	low risk of adverse impact
Land Use	change to non-agricultural use	no impact	no impact
Cultural Resources	no impact	no impact	no impact
Environmental Justice	minor access improvement	no impact	no impact
Floodplain/Wetland	no impact	no impact	no impact
Noise	minor increased noise	no impact	no impact
Lead Recovery	none - firing over cultivated field	no impact	none - firing over cultivated field
Economic Impacts	no impact	no use of federal grant money	no impact
Safety	large increase of safety	no impact	small increase of safety
Recreation	large improvement of shooting opportunity	no impact	very small improvement
Cumulative Impacts	meets "Need" (section 1.3)	need goals not met	meets "Need" but in short term

CHAPTER 5 LIST OF PREPARERS

Nora I. Kohlenberg
Associate Federal Assistance Coordinator
South Dakota Department of Game, Fish and Parks
Foss Building
523 East Capitol Avenue
Pierre, SD 57501-3182

Otto Jose
U.S. Fish and Wildlife Service
Federal Assistance
134 Union Blvd.
Lakewood, Co 80228

CHAPTER 6 CONSULTATION AND COORDINATION WITH THE PUBLIC AND OTHERS

Coordination with the WCSS has been ongoing since March 2005.

South Dakota Historical Preservation Office and the South Dakota Department of Game, Fish and Parks Natural Heritage Data Base Program has been

completed. Correspondence that was received is included as Attachments 10, 13, 14, and 15. Coordination with other agencies will continue on an as needed basis through project completion.

A public notice will be printed in the Grant County Review and the Watertown Public Opinion. There will be a public comment period and all comments will be documented in the final EA document.

CHAPTER 7 PUBLIC COMMENT ON DRAFT EA AND RESPONSE

The availability of the draft Environmental Assessment was announced in a news release, distributed statewide in South Dakota to all newspaper publishers, congressional delegates, and Bureau of Indian Affairs offices. A notice was also mailed to 14 landowners adjacent to the proposed range site. In addition the following agencies were involved in the pre-planning efforts of the project: Natural Resource Conservation District, South Dakota State Historic Preservation Center; and the Tribal Historic Preservation Officers for the following Tribes: Rosebud Sioux; Cheyenne River Sioux; and the Flandreau Santee Sioux. The draft Environmental Assessment was also made available online at http://mountain-prairie.fws.gov/federalassistance and http://www.sdgfd.info/Wildlife/hunting/Safety/WhetstoneProj.htm..

No comments were received on the draft EA.

CHAPTER 8 REFERENCES

Miller, K. F. 1979. Soil survey of Grant County, South Dakota. Washington, DC: U.S. Department of Agriculture, Soil Conservation Service. In cooperation with: U.S. Department of Agriculture, Forest Service; South Dakota Agricultural Experiment Station. 225 p.

National Shooting Sports Foundation, Environmental Aspects of Construction and Management of Outdoor Shooting Ranges, 1997.

Shearer, J.S. 2003. Topeka Shiner (*Notropis Topeka*) Management Plan for the State of South Dakota. South Dakota Department of Game, Fish and Parks, Pierre, Wildlife Division Report No. 2003-10, 82 pp.

U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C., Best Management Practices for Lead at Outdoor Shooting Ranges, EPA-902-B-01-001, March 2003.